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| 10/806,218 | 03/23/2004 | Byoung - Tae Kim | P-0582 | 1762 |
| 34610 7590 01/28/2008 KED & ASSOCIATES, LLP P.O. Box 221200 Chantilly, VA 20153-1200 | | | EXAMINER WENDMAGEGN, GIRUMSEW | |
| | | | ART UNIT 2621 | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/806,218

Applicant(s)

KIM, BYOUNG - TAE

Examiner

Girumsew Wendmagegn

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>12/6/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim1-2, 4, 7-8, 24-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Sato et al (Pub No US 2003/0053380).

Regarding claim1,24, Sato et al (hereinafter Sato) anticipates a variable search method for a recording medium containing video data, comprising: detecting and storing control information for each chapter of a title when a recording medium is inserted into a reproduction device (see page6 paragraph 094) ; performing a variable search mode comprising: performing viewable speed reproduction on a first portion of data content of the chapter (see page7 paragraph 0109; figure4); and performing a different speed reproduction on the remaining data content of the chapter on the basis of the stored data information (see page8 paragraph 0120; figure4).

Regarding claim2, 25, Sato anticipates the method of claim 1, wherein the recording medium comprises an optical disk (see page1 paragraph1; page2 paragraph 0029).

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Regarding claim4, Sato anticipates the method of claim 2, wherein data output on the screen has attributes comprising one of a MPEG file, PCM CD, and CD-DA (see page5 paragraph 0087).

Regarding claim7, Sato anticipates the method of claim1, wherein the stored data information comprises start and end positions of each chapter, attribute information for each chapter, and start track number of each item of each chapter stored on the recording medium (see page2 paragraph 0035-0037).

Regarding claim8, Sato anticipates the method of claim 1, wherein the variable search mode is repeatedly performed until the last chapter of a title is reproduced (see page8 paragraph 0121).

Claim20-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Sato et al (Pub No US 2003/0194224).

Regarding claim20, Nagasawa anticipates apparatus for reproducing video information on a recording medium comprising: a pick up unit configured to detect a recording signal on a recording medium (see figure29 element 8); a RF (radio frequency) processing unit configured to filter/shape the signal detected by the pick up unit (see figure29 elements 13); a driving unit configured to drive the pick up unit and a motor (see figure29 element 19); a servo unit configured to control operation of the

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driving unit (see figure 29 element 20); a microcomputer configured to perform viewable speed reproduction on data of a predetermined portion of the recording medium by controlling the RF processing unit and the driving unit through the servo unit when a viewable reproduction mode is selected, and when a variable search mode is selected, performing viewable speed reproduction on a predetermined portion, including a first I-frame of each chapter, and performing a different speed reproduction on the remaining portions of the chapter at variable speed (see figure26 element 46); and a memory configured to store attribute information of a data block of each session of the optical disk (see figure26 element 206).

Regarding claim21, Nagasawa anticipates the apparatus of claim 20, further comprising: a digital signal processing unit configured to convert a signal read by the RF processing unit into a digital signal, restore it into original data and output the data according to a data format (see figure29 element 14); an MPEG decoder configured to code the restored compressed data into moving picture data and output it (see figure29 element 15 ; page1 paragraph 0011) ; and an output data converter configured to convert the restored PCM (pulse code modulation) or text frame into audio and characters and output it (see figure29 element 17 and 18; page1 paragraph 0004).

Regarding claim22, the apparatus of claim20, wherein the different speed is a reference speed, a speed higher than the reference speed, or a speed lower than the reference speed (see page3 paragraph 0036).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3, 5-6, 9-10, 13-15, 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al (Pub No US 2003/0053380) as applied to claim Claim 1-2, 4, 7-8, 24-25 above, and further in view of Oseto (JP 2002199345).

Regarding claim 3, 5, 26, see the teaching of Sato. Sato does not teach displaying the pertinent track as an image on a screen. However Oseto teaches displaying the pertinent track (scene) as an image on a screen (see abstract).

One of ordinary skill in the art at the time the invention was made would have been motivated to display the pertinent scene (track) as in Oseto in to Sato method because it would make searching much more effective.

Regarding claim 6, Oseto teaches displaying the pertinent track as an image on a screen comprises displaying the pertinent track as an image on a screen for 1~2 seconds(s) (see abstract).

Regarding claim 9, 10, 27, see the teaching of Sato above. Sato does not teach a lower speed search mode for reproducing the recording medium at a speed lower than

the reference speed. However Oseto teaches changing the reproducing speed higher or lower than a reference speed (see abstract).

One of ordinary skill in the art at the time the invention was made would have been motivated to varying the reproduction speed as in Oseto in to Sato method because it would give the user more control of how fast or slow want to reproduce.

Regarding claim13, 14, 15, see the teaching of Sato above. Sato does not teach varying the reproduction speed in the variable search mode using a channel up/down key according to a user input. However Oseto teaches varying the reproduction speed in the variable search mode using a channel up/down key according to a user input (see abstract).

One of ordinary skill in the art at the time the invention was made would have been motivated to varying the reproduction speed as in Oseto in to Sato method because it would give the user more control of how fast or slow want to reproduce.

Claim16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagasawa (pub No US 2003/0194224) and Oseto (JP 2002199345).

Regarding claim16, Sato teaches a variable search method for a recording medium containing video data, comprising: detecting reproduction control information for each chapter recorded on the lead-in area of a recording medium and storing the reproduction control information (see figure4 read video attribute data); performing a

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variable search mode, when a search command is received, in which a first portion, including a first I-frame, of each chapter of a title of the recording medium, is reproduced for a specific time at a viewable speed on the basis of the reproduction control information and the remaining portions are reproduced at a different speed (see figure4 and page8 paragraph 0163) but does not teach varying the different speed according to a user command. However Oseto teaches varying the different speed according to a user command (see abstract).

One of ordinary skill in the art at the time the invention was made would have been motivated to varying the reproduction speed as in Oseto in to Nagasawa system because it would give the user more control of how fast or slow want to reproduce.

Regarding claim17, Nagasawa teaches the method of claim 16, wherein the viewable speed reproduction is performed on the predetermined portion, including a first I-frame of each chapter, on the basis of the reproduction control information read from a lead-in area of the recording medium, and then the different speed reproduction is performed until a predetermined portion, including a first I-frame of a next chapter, is detected, and thereafter the above-mentioned processes are performed repeatedly until a last chapter is reached (see figure4 and page4 paragraph 0060-0064).

Regarding claim18, Oseto teaches the method of claim17, wherein the different speed reproduction comprises higher speed reproduction (see abstract).

Regarding claim19, Oseto teaches the method of claim17, wherein the different speed reproduction comprises lower speed reproduction (see abstract).

Claim23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nagasawa (pub No US 2003/0194224) as applied to claim20-22 above, and further in view of Oseto (JP 2002199345).

Regarding claim23, see the teaching of Nagasawa above. Nagasawa does not teach the apparatus of claim 20, further comprising a channel up/down input, wherein the microcomputer performs search at the lower search speed or the higher search speed by controlling the operation of the RF processing unit and the driving unit through the servo unit in the variable speed search operation in accordance with a user input via the channel up/down input. However Oseto teaches changing reproducing speed with a user input (see abstract).

One of ordinary skill in the art at the time the invention was made would have been motivated to varying the reproduction speed as in Oseto in to Nagasawa system because it would give the user more control of how fast or slow want to reproduce

Claim11-12, 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al (Pub No US 2003/0053380) as applied to claim1-2, 4, 7-8, 24-25 above, and further in view of Nagasawa (pub No US 2003/0194224).

Regarding claim 11, see the teaching of Sato above. Sato does not teach the method of claim 1, wherein the viewable speed reproduction is performed on a predetermined portion, including a first I-frame of each chapter, and thereafter the different speed reproduction is performed until a predetermined portion, including a first I-frame of a next chapter, is detected, and the above-mentioned processes are performed repeatedly in the variable search mode. However Nagasawa teaches viewable speed reproduction is performed on a predetermined portion, including a first I-frame of each chapter, and thereafter the different speed reproduction is performed until a predetermined portion, including a first I-frame of a next chapter, is detected, and the above-mentioned processes are performed repeatedly in the variable search mode (see figure 4 and page 8 paragraph 0163).

One ordinary skill in the art at the time the invention was made would have been motivated to reproduce a predetermined portion including the first I-frame as in Nagasawa in to Sato method because it would make scan-searching (variable search mode) much effective.

Regarding claim 12, Nagasawa teaches the method of claim 11, wherein the different speed reproduction comprises higher speed reproduction (see figure 4 and page 4 paragraph 0060-0064).

Regarding claim 28, see the teaching of Sato above. Sato does not teach the method of claim 24, wherein the viewable speed reproduction is performed on a

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predetermined portion, including a first I-frame of each title, and thereafter the different speed reproduction is performed until a predetermined portion, including a first I-frame of a next title, is detected, and the above-mentioned processes are performed repeatedly in the variable search mode. However Nagasawa teaches predetermined portion, including a first I-frame of each title, and thereafter the different speed reproduction is performed until a predetermined portion, including a first I-frame of a next title, is detected, and the above-mentioned processes are performed repeatedly in the variable search mode (see figure4 and page8 paragraph 0163).

One ordinary skill in the art at the time the invention was made would have been motivated to reproduce a predetermined portion including the first I-frame as in Nagasawa in to Sato method because it would make scan-searching (variable search mode) much effective.

Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, absent unexpected results to the contrary.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Girumsew Wendmagegn whose telephone number is 571-270-1118. The examiner can normally be reached on 7:30-5:00, M-F, alr Friday off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tran Thai can be reached on (571)272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Thai Tran

Supervisory Patent Examiner

Girumsew Wendmagegn